## ■ GeneWise – Scroll-Informed DNA Interpretation

## A deterministic genomics protocol from Grounded DI LLC

GeneWise is a deterministic scroll-governed interpreter for genomic analysis and mutation safety mapping. Unlike probabilistic models, GeneWise operates under an entropy floor and scroll-verified lineage logic. Each molecular decision is traceable, ethics-locked, and reproducible across biological inputs.

Feature	Traditional Genomic Al	GeneWise
Mutation Mapping	Probabilistic guesswork	Scroll-traced deterministic lineage
Explainability	Post hoc inference	Scroll logic tree + entropy audit
Safety Layer	None or heuristic alerts	ΔH Floor + Scroll 91 ethics filter
Lineage Memory	Assumed ancestry	Logic-encoded genetic memory
Consent Architecture	EULA/opt-in	Scroll-authored override locks

## ■ Scroll-Informed DNA Cascade (Demo Frame)

This mock cascade demonstrates how GeneWise deterministically interprets a sequence variation with scroll-defined mutation logic, ethics layers, and override protection.

Original Sequence: 5' - ACGT | TAGC | GATA | CCGG - 3' Scroll Logic Gate: RKFE (Mutation Risk Filter)  $\rightarrow$  PASS  $\rightarrow$  Trigger: A  $\rightarrow$  G mutation at position 5  $\rightarrow$  Logic Check: PTDE (Placenta Transcript Integrity)  $\rightarrow$  PASS  $\rightarrow$  Ethics Layer: Scroll 91 – Approved Updated Sequence: 5' - ACGG | TAGC | GATA | CCGG - 3' Status:  $\blacksquare$  Scroll-Informed Edit Confirmed |  $\triangle$ H = 0.03 | Reflex: ON

Scroll Metadata: Vault = AGDI-Bio | ΔH = 0.03 | Reflex: ON | Authorship: Grounded DI LLC